Game Title – Game Design Document

V1.0 (Initial) – Tim Stolzenfeld – 11/23/14

Contents

[Table of Contents 2](#_Toc404513759)

[Design History 3](#_Toc404513760)

[Game Overview 4](#_Toc404513761)

[Game Concept 4](#_Toc404513762)

[Feature Set 4](#_Toc404513763)

[Genre 4](#_Toc404513764)

[Target Audience 4](#_Toc404513765)

[Game Flow Summary 4](#_Toc404513766)

[Look and Feel 4](#_Toc404513767)

[Project Scope 4](#_Toc404513768)

[Number of Locations 4](#_Toc404513769)

[Number of Levels 4](#_Toc404513770)

[Number of NPC’s 4](#_Toc404513771)

[Number of Weapons 4](#_Toc404513772)

[Game-play and Mechanics 5](#_Toc404513773)

[Game-play 5](#_Toc404513774)

[Game Progression 5](#_Toc404513775)

[Mission/Challenge Structure 5](#_Toc404513776)

[Objectives 5](#_Toc404513777)

[Play Flow 5](#_Toc404513778)

[Mechanics 5](#_Toc404513779)

[Physics 5](#_Toc404513780)

[Movement 5](#_Toc404513781)

[Objects (picking up, moving) 5](#_Toc404513782)

[Actions 5](#_Toc404513783)

[Combat 6](#_Toc404513784)

[Screen Flow 6](#_Toc404513785)

[Story, Setting and Character 6](#_Toc404513786)

[Story and Narrative 6](#_Toc404513787)

[Plot Elements 6](#_Toc404513788)

[Game Progression 6](#_Toc404513789)

[Game World 6](#_Toc404513790)

[General Look and Feel 6](#_Toc404513791)

[Area #1 6](#_Toc404513792)

[Area #2 7](#_Toc404513793)

[Area #3 7](#_Toc404513794)

[Area #4 7](#_Toc404513795)

[Area #5 7](#_Toc404513796)

[Player Character 8](#_Toc404513797)

[Back Story 8](#_Toc404513798)

[Personality 8](#_Toc404513799)

[Look 8](#_Toc404513800)

[Levels 8](#_Toc404513801)

[Level #1 8](#_Toc404513802)

[Synopsis 8](#_Toc404513803)

[Introductory Material 8](#_Toc404513804)

[Objectives 8](#_Toc404513805)

[Physical Description 8](#_Toc404513806)

[Map 8](#_Toc404513807)

[Encounters 8](#_Toc404513808)

[Closing Material 8](#_Toc404513809)

[Interface 9](#_Toc404513810)

[Visual System 9](#_Toc404513811)

[Rendering System 9](#_Toc404513812)

[Camera 9](#_Toc404513813)

[Lighting Models 9](#_Toc404513814)

[Control System 9](#_Toc404513815)

[Music 9](#_Toc404513816)

[Sound Effects 9](#_Toc404513817)

[Help System 9](#_Toc404513818)

[Artificial Intelligence 9](#_Toc404513819)

[Enemy AI 9](#_Toc404513820)

[Non-combat Characters 10](#_Toc404513821)

[Friendly Characters 10](#_Toc404513822)

[Technical 10](#_Toc404513823)

[Target Hardware 10](#_Toc404513824)

[Game Engine 10](#_Toc404513825)

[Network 10](#_Toc404513826)

[Scripting Language 10](#_Toc404513827)

[Game Art 11](#_Toc404513828)

[Characters 11](#_Toc404513829)

[Environments 11](#_Toc404513830)

[Equipment 11](#_Toc404513831)

[Cut Scenes 11](#_Toc404513832)

[Miscellaneous 11](#_Toc404513833)

[Asset List 11](#_Toc404513834)

[Art 11](#_Toc404513835)

[Model and Texture List 11](#_Toc404513836)

[Animation List 11](#_Toc404513837)

[Effects List 11](#_Toc404513838)

[Interface Art List 11](#_Toc404513839)

[Cut Scene List 11](#_Toc404513840)

[Sound 11](#_Toc404513841)

[Environment Sounds 11](#_Toc404513842)

[Weapon Sounds 11](#_Toc404513843)

[Interface Sounds 11](#_Toc404513844)

[Music 11](#_Toc404513845)

[Ambient 11](#_Toc404513846)

[Action 11](#_Toc404513847)

[Victory 11](#_Toc404513848)

[Defeat 11](#_Toc404513849)

# Design History

Version 1.0 (Initial) – 11/23/2014

# Game Overview

## Game Concept

This game will be a first person melee game. The player will be tasked with the objective of collecting 4 “power crystals” from around the world and will have to bring them back to a central location to win the game.

## Feature Set

* Player with melee weapon
* A single world to explore
* Objectives to win, requiring the player to fight and overcome obstacles

## Genre

First person melee (with a weapon)

## Target Audience

All

## Game Flow Summary

There will be four power crystals that the player must collect. All of these will exist on a single scene. The player must collect these power crystals in a unique order. Each time the player returns one of the power crystals, the player will obtain a unique “power” that allows them to proceed to the next power crystal without dying (or making it possible, in general). To start the game, the player will select the New Game option from the start menu.

## Look and Feel

The game will have a unique look and feel to it in each of the four areas where the player obtains the power crystals. The idea is that the player feels a sense of exploration as they move throughout the game.

## Project Scope

### Number of Locations

There will be a single scene with 5 unique areas.

### Number of Levels

There will be a single level.

### Number of NPC’s

There will be an arbitrary number of enemy NPC’s. No plans for friendly NPC’s.

### Number of Weapons

The player will have access to a single weapon.

# Game-play and Mechanics

## Game-play

### Game Progression

The player will move throughout areas of the single level to collect power crystals. These power crystals must be collected in a single order. By collecting power crystals, the player will obtain unique powers allowing them to proceed to the next area.

### Mission/Challenge Structure

Let us consider each power crystal acquisition to be a mission. Acquisition of each power crystal will be a unique experience. One may require the player to defeat enemies; another may require the player to overcome a puzzle, another may require the player to overcome an environment obstacle.

### Objectives

Collect the four power crystals

### Play Flow

Collect power crystals in a unique order, gaining powers allowing the player to explore other areas to collect the other power crystals.

## Mechanics

### Physics

Physics will emulate our reality (Earth like physics).

### Movement

The player will use a first-person movement controller.

### Objects (picking up, moving)

The player must run on top of an object to pick it up.

### Actions

* Run
* Slide Left/Right
* Turn
* Stop
* Pick-up object
* Melee attack
* Die

#### Buttons

|  |  |
| --- | --- |
| Run | W |
| Slide Left/Right | A/D |
| Turn | Mouse |
| Melee attack | Spacebar |

#### Picking Up, Carrying and Dropping

To pick up an object, the player must run over it. Carrying will be done passively once the object is picked up. To drop the object, the player must bring it to the correct location. The plan is to only have power crystals for the player to pickup, carry and drop.

#### Talking

Talking will be minimal. The player character may speak vaguely to help guide the player to play the game correctly.

### Combat

The player will engage in combat by swinging their axe. Enemies may attack the player by simply touching them, meleeing them or by shooting projectiles which the player must avoid (or deflect with weapon?).

Die?

## Screen Flow

-> ->

Win Splash Screen

Main Game-play

Main Menu

# Story, Setting and Character

## Story and Narrative

The player must collect all of the power crystals to make the world nice again.

### Plot Elements

A plot is beyond the scope of this project.

### Game Progression

Collect power crystals, become more powerful allowing the player to collect the other power crystals

## Game World

### General Look and Feel

Dark and grim, at first. There will be a variety of looks and feels between each “area” which contains a power crystal (idea is that they are all uniquely different). Once the player collects all of the power crystals and wins the game, the environment should become a much friendlier place. This indicates to the player that they have met the goal of making the world nice again.

### Area #1

#### General Description

Starting area and location where the player returns the power crystals to.

#### Physics Characteristics

Dark, grim.

#### Connections to other Areas

Central to all other areas.

### Area #2

#### General Description

Location of power crystal #1.

#### Physics Characteristics

#### Connections to other Areas

Connected to the central starting area and the two areas adjacent to itself.

### Area #3

#### General Description

Location of power crystal #2.

#### Physics Characteristics

#### Connections to other Areas

Connected to the central starting area and the two areas adjacent to itself.

### Area #4

#### General Description

Location of power crystal #3.

#### Physics Characteristics

#### Connections to other Areas

Connected to the central starting area and the two areas adjacent to itself.

### Area #5

#### General Description

Location of power crystal #4.

#### Physics Characteristics

#### Connections to other Areas

Connected to the central starting area and the two areas adjacent to itself.

## Player Character

### Back Story

An explorer who became trapped in a dark unfriendly world

### Personality

Brave, adventurous

### Look

The player will only see the weapon of the character.

#### Animations

Swinging the weapon and running (weapon bouncing up and down)

#### Special Abilities

None at this time

#### Relevance to Game Story

The character is trying to make the world a nice place again

# Levels

## Level #1

### Synopsis

Player must collect all power crystals

### Introductory Material

The player will be prompted (by the character or by on-screen prompts) on how the basics of the game work. It will be some type of interactive introduction to the game.

### Objectives

Collect all four power crystals

### Physical Description

Varied, different within each area

### Map

May or may not be a map

### Encounters

There will be encounters with a number of different enemies and environment components.

### Closing Material

There will be a screen devoted to a “you won” type of thing.

# Interface

## Visual System

The player will see through the player characters eyes. The interface will be minimal, displaying the player’s health and power crystal status.

### Rendering System

The interface will be rendered with another camera.

### Camera

First-person

### Lighting Models

## Control System

First-person control system:

|  |  |
| --- | --- |
| Run | W |
| Slide Left/Right | A/D |
| Turn | Mouse |
| Melee attack | Spacebar |

## Music

Each area will have its own unique music, complementing the look and feel of the area.

## Sound Effects

* Collecting power crystals
* Running
* Getting hit
* Attacking
* Dying
* Returning power crystals to drop-off location

## Help System

* Controls menu
* Interactive help to guide player into playing game

# Artificial Intelligence

## Enemy AI

The enemies will have an agro radius. When the player enters this radius, the enemies will either chase the player or shoot at the player (depending on the type of enemy). Some enemies may have melee attacks which will happen when they are close enough to the player.

## Non-combat Characters

## Friendly Characters

# Technical

## Target Hardware

PC

## Game Engine

Unity

## Network

## Scripting Language

C#

# Game Art

## Characters

## Environments

## Equipment

## Cut Scenes

## Miscellaneous

# Asset List

## Art

### Model and Texture List

### Animation List

### Effects List

### Interface Art List

### Cut Scene List

## Sound

### Environment Sounds

### Weapon Sounds

### Interface Sounds

## Music

### Ambient

### Action

### Victory

### Defeat